UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,499	08/14/2001	Christian D. Garcia	68.0194 CON	9552

7590 05/21/2003

SCHLUMBERBER TECHNOLOGY CORPORATION
14910 Airline Road
P.O. Box 1590
Rosharon, TX 77583-1590

EXAMINER
HALFORD, BRIAN D

ART UNIT	PAPER NUMBER
3672	

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/929,499	GARCIA ET AL.
	Examiner	Art Unit
	Brian D Halford	3672

-- The MAILING DATE of this communication appears on the cov r sheet with th correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 March 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-46* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *31-39* is/are allowed.

6)☒ Claim(s) *1-6,8,9,11-14,16-19,40-43 and 46* is/are rejected.

7)☒ Claim(s) *7,10,15,20-30,44 and 45* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Debris-free valve apparatus and method of use.

Claim Objections

2. Claim 40 is objected to because of the following informalities: line 6 contains the misspelling, "preformed"; consequently, the error should be amended to read, - - performed- -. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3 and 5-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Gazda. The patent to Gazda discloses a safety valve for employment in a production tubing string or completion string with an accompanying inherent method of use. The safety valve is selectively operable and responsive to control fluid pressure. Figure 1 depicts the safety valve tool string (32) landed in a tubing string or completion string

(22). The concatenation of Figures 2A, 2B, 2C and 2D constitute a safety valve tool string (32); however, as disclosed by Gazda in lines 35-37 of column 9, Figure 4 may be utilized in lieu of Figure 2D. Figure 4 illustrates a flapper valve portion (35B) of the safety valve tool string (32) that is employed in concert with Figures 2A, 2B and 2C. Gazda delineates the operation of the flapper valve portion (35B) in lines 65-68 and 1-18 of respective columns 9 and 10. A flapper valve (254) is positioned within a lower valve housing or housing member (210b). As depicted in Figure 4, the lower valve housing or housing member (210b) possesses first and second segments with respective first and second diameters; furthermore, the inner diameter of the second segment exceeds the inner diameter of the first segment. The flapper valve (254) assumes an open condition upon downward axial translation of a valve operator tube or sliding sleeve (201b). Conversely, as disclosed in lines 1-4 of column 10, a seat surface (253) of the flapper valve (254) rotates upwardly on a pin (260) to mate with an annular valve seat surface (252), which is provided on the lower end of the valve operator tube or sliding sleeve (201b).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gazda in view of Carmody ('071). The patent to Gazda has been discussed *supra*. Gazda fails to disclose, however, the use of elastomeric sealing materials on the valve seat, which is provided on the lower end of the operator tube or sliding sleeve. Gazda further fails to disclose the use of a torsion spring to realize sealing as the operator tube or sliding sleeve undergoes upward axial translation. With regard to flapper valve arrangements, it is noted by the Examiner that elastomeric seals and torsion springs are notoriously conventional in the wellbore and fluid control art to respectively realize an effective seal and to achieve valve closure. As such, the patent to Carmody discloses a flapper type safety valve that is operated by an actuating sleeve. As shown in Figures 1-2 and discussed in lines 43-68 and 1-51 of respective columns 2 and 3, a torsion spring is conventionally wrapped around a pin (14) to exert an upward pivotal bias on the flapper (20) urging it to a closed state. Furthermore, an elastomeric seal (13) is provided on a valve seat (32) to mate with the sealing surface (21) of the flapper (20). Therefore, it would have been obvious to a person having ordinary skill in the art, at the time the invention was made, to equip the valve seat of Gazda with elastomeric material as taught by Carmody to afford a robust seal and to equip the pin of Gazda with a torsion spring as taught by Carmody to realize flapper valve closure in the absence or failure of the control fluid of Gazda.

7. Claims 40-43 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gazda. The patent as disclosed by Gazda has been discussed *supra*. The valve of Gazda is selectively operable responsive to control fluid pressure. Gazda fails to

recite, *per se*, the exact steps as claimed in the respective methods. However, as stated, an operator realizes the desired position of the valve with the aid of control fluid pressure lines. Furthermore, lines 6-8 of column 12 disclose the removal of safety valve tool string (32) from the tubing string or completion string (22) via wireline. Again, Gazda fails to recite, *per se*, the exact time at which the tool string (32) is withdrawn from the tubing string or completion string (22). However, as taught by Gazda, the tool string (32) is peculiar since it can be withdrawn—the tool string (32) will be withdrawn from the well as desired in a peculiar wellbore operation. Therefore, it would have been obvious to a person having ordinary skill in the art, at the time the invention was made, to lock the flapper valve in a closed position after wellbore operations have been completed and to subsequently withdraw the tool string from the wellbore to realize the engineering requirements of a peculiar wellbore operation.

Double Patenting

8. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

9. Claims 1-2, 5-6, 8-9, 11-14 and 16-19 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-7, 12-16, 20-21, 24, 26-

27 and 31-37 of copending Application No. 09/754464. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Allowable Subject Matter

10. Claims 31-39 are allowed.

11. Claims 7, 10, 15, 20-30 and 44-45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

12. Applicant's arguments with respect to claims 1, 3-7, 40, 42-44 and 46 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D Halford whose telephone number is (703) 306-0556. The examiner can normally be reached on M-F 10:30-8:00; alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J Bagnell can be reached on (703) 308-2151. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1020.

David Bagnell
Supervisory Patent Examiner
Art Unit 3672

BDH BDH
May 6, 2003